[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0776; Directorate Identifier 2009-NE-32-AD]

RIN 2120-AA64

Airworthiness Directives; Dowty Propellers Constant Speed Propellers

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to revise airworthiness directive (AD) 2010-17-11R1, which applies to all Dowty Propellers R408/6-123-F/17 model propellers. AD 2010-17-11R1 requires initial and repetitive application of sealant between the bus bar assembly and the backplate assembly of certain line-replaceable units (LRUs). That AD also provides an optional terminating action to the repetitive re-application of sealant. This proposed AD would increase the interval allowed between the required re-application of sealant, and would specify an additional acceptable sealant. We are proposing this AD to prevent an in-flight double generator failure, which could result in reduced control of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.

• Fax: 202-493-2251.

• Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Dowty Propellers, Anson Business Park, Cheltenham Road East, Gloucester GL2 9QN, UK; phone: 44 (0) 1452 716000; fax: 44 (0) 1452 716001. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2009-0776; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the mandatory continuing airworthiness information, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Michael Schwetz, Aerospace Engineer, Boston Aircraft Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7761; fax 781-238-7170; email: michael.schwetz@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2009-0776; Directorate Identifier 2009-NE-32-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On August 5, 2010, we issued AD 2010-17-11, Amendment 39-16403 (75 FR 51656, August 23, 2010), ("AD 2010-17-11"), for Dowty Propellers model R408/6-123-F/17 propellers. AD 2010-17-11 required initial application and repetitive re-application of sealant between the bus bar assembly and the backplate assembly of LRU serial numbers below DAP0347. AD 2010-17-11 resulted from failure of the propeller de-ice bus bar due to friction or contact between the bus bar and the backplate assembly, consequent intermittent short circuit, and possible dual alternating current generator failure.

On June 18, 2013, we issued AD 2010-17-11R1, Amendment 39-17481 (78 FR 41283, July 10, 2013), for Dowty Propellers R408/6-123-F/17 model propellers. AD 2010-17-11R1 added an optional terminating action to the requirement for the repetitive re-application of sealant. AD 2010-17-11R1 resulted from Dowty Propellers development of a new slip ring de-icer harness to replace the bus bar assembly. We issued AD 2010-17-11R1 to prevent an in-flight double generator failure, which could result in reduced control of the airplane.

Actions Since AD 2010-17-11R1 Was Issued

Since we issued AD 2010-17-11R1, Dowty Propellers issued Alert Service Bulletin (ASB) No. D8400-61-A66, Revision 8, dated October 31, 2013. That ASB increased the interval between required re-application of sealant from 10,000 flight hours (FHs) to 10,500 FHs. That ASB identified an additional acceptable sealant. The European Aviation Safety Agency has issued AD 2009-0114R2, dated December 16, 2013, which incorporates the revised schedule for re-application of sealant.

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Relevant Service Information

We reviewed Dowty Propellers ASB No. D8400-61-A66, Revision 8, dated October 31, 2013. The ASB describes procedures for performing initial and repetitive re-application of sealant between the bus bar assembly and the backplate assembly of certain LRUs.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would increase the interval from 10,000 FHs to 10,500 FHs between re-application of sealant, and would allow use of an additional acceptable sealant.

Costs of Compliance

We estimate that this proposed AD would affect 104 propellers installed on airplanes of U.S. registry. We also estimate that it would take about 2 hours per propeller to comply with this proposed AD. The average labor rate is $85 per hour. Required parts cost about $20 per propeller. Based on these figures, we estimate the total cost of this proposed AD to U.S. operators is $19,760.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Amend § 39.13 by removing airworthiness directive (AD) 2010-17-11R1, Amendment 39-17481 (78 FR 41283, July 10, 2013), and adding the following new AD:

Dowty Propellers: Docket No. FAA-2009-0776; Directorate Identifier 2009-NE-32-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD revises AD 2010-17-11R1, Amendment 39-17481 (78 FR 41283, July 10, 2013).

(c) Applicability

This AD applies to Dowty Propellers R408/6-123-F/17 model propellers with a hub, actuator, and backplate assembly line-replaceable unit (LRU) serial number (S/N) below DAP0927.

(d) Unsafe Condition

This AD was prompted by failure of the propeller de-ice bus bar due to friction or contact between the bus bar and the backplate assembly, consequent intermittent short circuit, and possible double generator failure. We are issuing this AD to prevent an in-flight double generator failure, which could result in reduced control of the airplane.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) For R408/6-123-F/17 model propellers with a hub, actuator, and backplate assembly LRU S/N below DAP0347, do the following initial sealant application within 5,000 flight hours (FHs) after September 27, 2010, or within 100 FHs after the effective date of this AD, whichever occurs later:

(i) Apply a sealant specified in Dowty Propellers Alert Service Bulletin (ASB) No. D8400-61-A66, Revision 8, dated October 31, 2013 between the bus bar assemblies and the backplate assembly.

(ii) Use paragraph 3.A. or 3.B. of the Accomplishment Instructions of Dowty Propellers ASB No. D8400-61-A66, Revision 8, dated October 31, 2013, to apply the sealant.

(2) Thereafter, for R408/6-123-F/17 model propellers, with a hub, actuator, and backplate assembly LRU S/N below DAP0927, re-apply sealant as specified in paragraphs (e)(1)(i) and (e)(1)(ii) of this AD within every additional 10,500 FHs.

(f) Installation Prohibition

After the effective date of this AD, do not install any Dowty Propellers R408/6-123-F/17 model propeller unless a sealant specified in Dowty Propellers ASB No. D8400-61-A66, Revision 8, dated October 31, 2013 was applied between the bus bar assembly and the backplate assembly as specified by this AD, or unless the optional terminating action as specified in paragraph (g) of this AD was performed.

(g) Optional Terminating Action

As optional terminating action to the sealant application requirements of this AD, replace the bus bar assembly with a slip ring de-icer harness. Use paragraph 3.A. of the Accomplishment Instructions of Dowty Propellers Service Bulletin (SB) No. D8400-61-94, Revision 2, dated August 29, 2012, or Revision 3, dated October 23, 2012, to do the replacement.

(h) Credit for Previous Actions

Sealant applications performed before the effective date of this AD using Dowty Propellers SB No. D8400-61-66, dated February 9, 2007; or Revision 1, dated May 4, 2007; or ASB No. D8400-61-A66, Revision 2, dated August 19, 2009; or Revision 3, dated November 10, 2009; or Revision 4, dated January 19, 2010; or Revision 5, dated June 16, 2010; or Revision 6, dated August 17, 2011; or Revision 7, dated December 1, 2011, satisfy the initial sealant application requirement of this AD.

(i) Alternative Methods of Compliance (AMOCs)

The Manager, Boston Aircraft Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(j) Related Information

(1) For more information about this AD, contact Michael Schwetz, Aerospace Engineer, Boston Aircraft Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7761; fax 781-238-7170; email: michael.schwetz@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency, AD 2009-0114R2, dated December 16, 2013, for more information. You may examine the MCAI in the AD

docket on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2009-0776.

(3) Dowty Propellers ASB No. D8400-61-A66, Revision 8, dated October 31, 2013, and Dowty Propellers SB No. D8400-61-94, Revision 3, dated October 23, 2012, pertain to the subject of this AD and can be obtained from Dowty Propellers, using the contact information in paragraph (j)(4) of this AD.

(4) For service information identified in this AD, contact Dowty Propellers, Anson Business Park, Cheltenham Road East, Gloucester GL2 9QN, UK; phone: 44 (0) 1452 716000; fax: 44 (0) 1452 716001.

(5) You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on March 11, 2014.

Kim Smith,
Acting Directorate Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

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